

$T_{cs0}^*(2870)^0$

$I(J^P) = ?(0^+)$

OMITTED FROM SUMMARY TABLE

was $X_0(2900)$

An exotic state with minimal quark content $\bar{c}d\bar{s}u$. Observed by AAIJ 20A1 using full amplitude analysis of $B^+ \rightarrow D^+ D^- K^+$ decays.

 $T_{cs0}^*(2870)^0$ MASS

VALUE (MeV)	EVTs	DOCUMENT ID	TECN	COMMENT
2866±7±2	1.2k	¹ AAIJ	20A1 LHCB	$B^+ \rightarrow D^+ D^- K^+$

¹ Obtained from the full amplitude analysis. Parameterized with the relativistic Breit-Wigner line shape. Also confirmed by the model-independent analysis of AAIJ 20AF.

 $T_{cs0}^*(2870)^0$ WIDTH

VALUE (MeV)	EVTs	DOCUMENT ID	TECN	COMMENT
57±12±4	1.2k	¹ AAIJ	20A1 LHCB	$B^+ \rightarrow D^+ D^- K^+$

¹ Obtained from the full amplitude analysis. Parameterized with the relativistic Breit-Wigner line shape. Also confirmed by the model-independent analysis of AAIJ 20AF.

 $T_{cs0}^*(2870)^0$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad D^- K^+$	seen

 $T_{cs0}^*(2870)^0$ BRANCHING RATIOS

$\Gamma(D^- K^+)/\Gamma_{\text{total}}$	Γ_1/Γ		
VALUE	DOCUMENT ID	TECN	COMMENT
seen	AAIJ	20A1 LHCB	$B^+ \rightarrow D^+ D^- K^+$

 $T_{cs0}^*(2870)^0$ REFERENCES

AAIJ	20AF PRL 125 242001	R. Aaij <i>et al.</i>	(LHCb Collab.)
AAIJ	20A1 PR D102 112003	R. Aaij <i>et al.</i>	(LHCb Collab.)